



life+mqn

making good natura

Final informational report of the project

LAYMAN'S REPORT



The project in brief

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Making public good provision the core business of Natura 2000 Life+ code
LIFE11 ENV/IT/000168

Componente Life+
Environmental Policy and Governance

Duration
4 years (2012 – 2016)

Lead Partner
CURSA (the University Consortium for Socioeconomic and Environmental Research)

Institutional Partners
WWF Italy, EURAC (the European Academy of Bozen/Bolzano), WWF Research and Projects, Pollino National Park, Cilento National Park, Vallo di Diano e Alburni, Sasso Simone e Simoncello Interregional Park, The Region of Sicily (Department of the Regional Company of State Forests) The Region of Lombardy, ERSAF (Agency for Agricultural and Forestry Services of Lombardy)

Project Co-financiers
Italian Ministry of the Environment and Protection of Land and Sea and Ministry of Agriculture and Forestry

Regions involved
Basilicata, Calabria, Campania, Emilia-Romagna, Marche, Lombardy, Sicily

Biogeographic regions
Mediterranean, continental alpine

Number of pilot sites in the Natura 2000 network
21

Land surface area
90,239 hectares

LIFE+ contributions
1,863,441 or 49.95 % of the estimated total cost
3,751,684, donations, etc.

LIFE+ Making Good Natura is the first project in Italy to develop new environmental governance pathways for stewardship of agroforestry ecosystems. The project was developed under the LIFE+ component, Environmental Policy and Governance, in order to co-finance innovative projects and ensure the application of the environmental policies of the EU. The project has developed modalities of qualitative and quantitative biophysical assessment of ecosystem services (ES) in sites of the Natura 2000 network. The focus of the project was to create the conditions for achieving effective management of habitats, animal and plant species, designated by the Habitats and Birds Directives, providing administrators responsible for Natura 2000 sites the management tools and self-financing instruments that constitute forms of remuneration for management activities. The self-financing instruments that were investigated and developed are payment for ecosystem services (PES) and specific mechanisms including tradable permits, fees for use of services, Verified Emission Reduction for the absorption of CO₂, commercial activities and donations.



Project sites and activities

THE SITES

The LIFE+ Making Good Natura project involved 21 pilot sites of the Natura 2000 network, including 8 Special Protection Areas (SPAs), 12 Sites of Community Importance (SCIs) and 1 combined SPA and SCI site for a total surface area of over 90,000 hectares. Fifty different habitats of the Natura 2000 network were included, of which 12 are considered priority.



THE ACTIVITIES

Analysis of ecosystem services in the pilot sites

The objective of this activity was to prepare a framework for the identification and analysis of ecosystem services. Over the course of this activity, the characteristics of

different pilot sites were analysed, considering the different types of environments present. Following a literature search and a comparative analysis for identification and evaluation of ecosystem services in the sites, an in depth analysis of ecosystem services was carried out at each individual site. In a second phase of this activity, an analysis of particular ES of the diverse types of environments was performed and ES associated with each habitat were selected. For this purpose, relationships were drawn between habitats present at sites and a list of ES, following the nomenclature of the Millennium Ecosystem Assessment (2005).

Analysis of management and financing regarding ecosystem services in the pilot sites

The principal objective of this activity was to analyse management measures and instruments of the pilot sites in relation to their ecological functioning, including safeguard measures, management plans, etc. Throughout this activity, the effects of rural development policies were evaluated – the cumulative impact of CAP measures proposed in Agenda 2000 – with the aim of improving the competitiveness of rural areas and encourage farmers to adopt sustainable management practices and safeguard the environment and landscape as public goods and services of ecological and socioeconomic importance. This activity had as its objective the design of a model for qualitative and quantitative assessment of ecosystem services present in the site.

Demonstrative model of evaluation of management effectiveness in pilot sites

The project envisaged the definition of an innovative model as the primary evaluation criterion regarding the protection of elements of biodiversity through provision of ecosystem services.

The model was elaborated through development and implementation of specific operational tools that incorporate economic evaluation of ecosystem services provided by habitats and environments of the Natura 2000 sites in relation to the conservation status of ecosystems/habitats (art. 1 Direttiva Habitat 92/43/CEE). This activity was aimed at the definition of an economic, environmental and territorial budget articulated on two levels: the first at the site level and the second at the watershed level, on which the site interacts in biophysical and socio-economic terms.

Demonstrative model of governance of Making Good Natura sites based on PES and self-financing arrangements

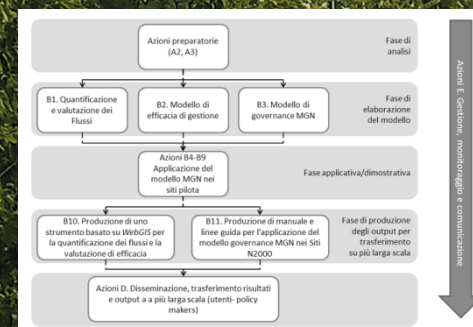
This activity involved the design of innovative and demonstrative activities aimed at ensuring efficient management of Natura 2000 pilot sites through valorisation of the contribution of natural systems, habitats, and stewardship of biodiversity to sustainable management of the territory.

Demonstrative application of the MAKING GOOD NATURA governance model in pilot sites

This activity had the objective of applying the model created during the preparatory activities and in other actions in order to evaluate its potential use in different contexts and in order to effectively measure the value of ecosystem services to establish a complete picture of governance of the site.

Software for evaluation and quantification of ecosystem services

As part of this activity a digital tool was developed based on web technologies that was directed at use by management authorities responsible for Natura 2000 sites. This innovative tool may also be used by other organizations or administrative units. The software allows for identification of different types of ecosystem services using data of beneficiaries. It is able to respond to different requirements relating to ES in Natura 2000 sites, for example, to estimate flows of ES (supply, demand), measure the impacts of changes in flows of ES (due to climate, population and changes in supply or demand of ES), and elaboration of potential scenarios and impacts of management measures on ES. The software, taking the form of a WebGIS geodatabase, allows for management of digital cartography of a project (e.g., land use, hydrographic network, infrastructure, administrative boundaries, and mapping of ecosystem services).



Results of the LIFE+ MGN project

The results of LIFE+ MGN can be summarised in numbers as follows: In each of the 21 project pilot sites, 3 priority ES were analysed for a total of 63 ES for all sites combined. The total economic value of these services is estimated at over 2 billion euros, for an average value of about 15,000 euros per hectare. In 49 cases, agreements were reached for self-financing and in 43 cases, PES schemes were arranged. As such, LIFE+ MGN has become the primary reference point for PES in Italy.

SITE	SERVICE	ESTIMATED VALUE (€)	Description of PES agreement
SPA IT2040401 PR Orobie Valtellinesi	F2 - Forage, pasture	€ 1.575.175,80	The farmer uses good conservation practises on alpine pastures in the area and obtains certification of the Park
	F3 - Hunting and fishing	€ 1.037.478,00	Agreement between manager and hunters to dedicate work days to maintenance and management of natural capital
	R3 - Regulation of water (recharge of aquifers)	€ 448.314.915,00	The agreement was born from the site management body. The revenue generated from a regional rent received by the province is usable for environmental restoration initiatives and maintenance of the resource
SPA IT20A0402 Lanca di Gerole	F3 - Hunting and fishing	€ 6.840,00	Sport fishing license fees used for maintenance of aquatic habitats
	R6 - Protection from hydrologic instability	€ 103.730.000,00	Granting of a percentage of rent paid by managers of land to the region for protection from landslides
	C1 - Aesthetic value	n.d.	A convention scheme was suggested to award concessions to multifunctional farm enterprises for the management of services of the Lanca di Gerole regional reserve, SPA IT20A0402 as payment for ecosystem services related to aesthetic value of the site. It was not possible to sign agreements due to lack of financial resources necessary for the realisation of infrastructure for use necessary to stimulate interest and involvement of farmers. The Lombardy Region intends, however, to promote a strategy for dissemination of actions for valorisation and promotion of multifunctionality of farms in the management of Natura 2000 sites, including through actions under the integrated Life project, "Managing 2020: Development of a strategy for management of the Natura 2000 Network in Lombardy".
SPA IT20B0501 Viadana	F4 - Raw materials (wood, timber, fibers, ...)	€ 492,00	Maintenance of poplar silviculture activities financed with part of proceeds from regional fees
	R6 - Protection from hydrologic instability	€ 699.338.000,00	Granting of a percentage of rent paid by managers of land to the region for protection from landslides
	C2 - Recreational value (ecotourism...)	€ 41.573,00	Activation of measures of the RDP or ROP of the Lombardia Region to create light infrastructure for enjoyment of the Natura 2000 site with the involvement of agriturismo companies
SCI IT2020002 Sasso Malascapa	R3 - Regulation of water (recharge of aquifers)	€ 7.458.083,00	Use of silvicultural techniques and management of alpine grazing areas to favour infiltration of water to guarantee supply of ES.
	R6 - Protection from hydrologic instability	€ 3.167.788,00	Ensuring maintenance of the site's ability to store groundwater and maintain downstream water flow for multiple uses. A payment on the part of water service managers (ASIL) of a percentage of water bills (3% according to the Galli Law) for maintenance of traditional activities tied to alpine pastures would fund traditional maintenance of forest and pasture areas in the interest of favouring surface water flows and resulting groundwater recharge. There was no feedback from ASIL representatives for such a scheme.
	C1 - Aesthetic value	n.d.	The agreement involves annual compensation for conservation action by a mobile telecommunications company that owns a repeater located at the site.
	F5 - Mushrooms and truffles, berries, non wood forest products	n.d.	The "Eat your habitat wooding" cultural association signed a contract at the conclusion of the project for gathering of buds larch, fir and herbaceous species in order to create new dishes for restaurants with ingredients collected locally from the forest. The value, fixed at 5-10 euros per kg depending on the species, is paid by training and environmental outreach activities to be realised by the association under the education and outreach activities organised annually by ERSAF.
SPA IT2020301 Triangolo Lariano	R1 - Carbon sequestration	€ 1.399.638,99	Sale of carbon credits arising from savings of a quantity of wood in cubic meters with respect to the national/regional average that corresponds to the storage of tonnes of CO2 equivalents resulting from sustainable forest management practices undertaken over time by the management body
	C2 - Recreational value (ecotourism...)	€ 1.193.873,57	Signing of two agreements planned providing 1) discounts for hikers combining purchase of train tickets and tourism experience at the site and 2) advertising by the railway company using media channels and promotional materials
	C3 - Inspiration for culture, the arts, educational and spiritual values and identity	more than 0 but n.d.	Activation of a telephone number to allocate small payments (€1) via SMS to cover costs of safeguarding and restoration of cultural recreational services
	F2 - Forage, pasture	n.d.	A contract was stipulated "for concession of pastures and annexed agricultural tourism infrastructure of Terz'Alpe", which is property of the Lombardy Region sited in the "Corni di Canzo" Regional Forest in the municipality of Canzo (CO). The pasture manager pays an annual fee to ERSAF for fodder for livestock. In turn, the manager obtains a discount on this fee for appropriate grassland management, which is assessed by ERSAF following annual monitoring of supported activities. The pasture manager is thus both a supplier and beneficiary of ES.

	F5 - Mushrooms and truffles, berries, non wood forest products	n.d.	The "Eat your habitat wooding" cultural association signed a contract at the conclusion of the project for gathering of buds larch, fir and herbaceous species in order to create new dishes for restaurants with ingredients collected locally from the forest. The value, fixed at 5-10 euros per kg depending on the species, is paid by training and environmental outreach activities to be realised by the association under the education and outreach activities organised annually by ERSAF.
SPA IT2070303 Val Grigna	F2 - Forage, pasture	€ 235.200,00	Discount on rent paid by herders in alpine areas to pay for local conservation actions on pastures
	F5 - Mushrooms and truffles, berries, non wood forest products	n.d.	The "Eat your habitat wooding" cultural association signed a contract at the conclusion of the project for gathering of buds larch, fir and herbaceous species in order to create new dishes for restaurants with ingredients collected locally from the forest. The value, fixed at 5-10 euros per kg depending on the species, is paid by training and environmental outreach activities to be realised by the association under the education and outreach activities organised annually by ERSAF.
	C2 - Recreational value (ecotourism...)	€ 74.341,85	Activation of a telephone number to allocate small payments (€1) via SMS to cover costs of safeguarding and restoration of cultural recreational services
	C3 - Inspiration for culture, the arts, educational and spiritual values and identity	more than 0 but n.d.	Activation of a telephone number to allocate small payments (€1) via SMS to cover costs of safeguarding and restoration of cultural recreational services
	F4 - Raw materials (wood, timber, fibers, ...)	n.d.	The agreement stems from the initiative of ERSAF to market a quantity of timber taken from the Forests of Lombardy, whose sustainable management is certified by FSC and PEFC. The agreement funds activities connected to maintenance of this sustainable forest management model through improvement of the quality of habitats of the Val Grigna SPA. A public tender for pluriannual auction of forest lots was put in place. Promotion and valorisation of the Forest of Lombardy Val Grigna in the municipalities of Bienno and Bovegno and of the Vaia Forest in the municipality of Bagolino – BS (Criteria and modalities of sale of woody material of the Lombardy Forests – art. 7 – approved with ERSAF Deliberation no. II/85 of 31-03-09 and no. 5027 of 15-07-2013) was stipulated in which ERSAF recognises the production of wood as a provisioning ES generated by forested lands, whose conservation is supported by appropriate forestry practices.
SCI IT2070021 Valvestino	R1 - Carbon sequestration	€ 15.478.836,84	Sale of carbon credits arising from savings of a quantity of wood in cubic meters with respect to the national/regional average that corresponds to the storage of tonnes of CO2 equivalents resulting from sustainable forest management practices undertaken over time by the management body
	R3 - Regulation of water (recharge of aquifers)	€ 137.142.220,00	Use of silvicultural techniques and management of alpine grazing areas to favour infiltration of water to guarantee supply of ES.
	R5 - Protection from erosion and geological instability (landslides, slope instability)	€ 2.886.636,00	Granting of a percentage of rent paid by managers of land to the region for protection from landslides
	C2 - Recreational value (ecotourism...)	€ 442.383,13	Activation of a telephone number to allocate small payments (€1) via SMS to cover costs of safeguarding and restoration of cultural recreational services
	F5 - Mushrooms and truffles, berries, non wood forest products	n.d.	The "Eat your habitat wooding" cultural association signed a contract at the conclusion of the project for gathering of buds larch, fir and herbaceous species in order to create new dishes for restaurants with ingredients collected locally from the forest. The value, fixed at 5-10 euros per kg depending on the species, is paid by training and environmental outreach activities to be realised by the association under the education and outreach activities organised annually by ERSAF.
SCI IT2070022 Corno della Marogna	F7 - Genetic resources	€ 9.997,34	Buying and selling (on the part of the management body) of seeds, with proceeds allocated to maintenance of the production value of seed forests and seeds of various species
	R1 - Carbon sequestration	€ 8.666.537,98	Sale of carbon credits arising from savings of a quantity of wood in cubic meters with respect to the national/regional average that corresponds to the storage of tonnes of CO2 equivalents resulting from sustainable forest management practices undertaken over time by the management body
	C2 - Recreational value (ecotourism...)	€ 442.383,13	Activation of a telephone number to allocate small payments (€1) via SMS to cover costs of safeguarding and restoration of cultural recreational services
	F5 - Mushrooms and truffles, berries, non wood forest products	n.d.	The "Eat your habitat wooding" cultural association signed a contract at the conclusion of the project for gathering of buds larch, fir and herbaceous species in order to create new dishes for restaurants with ingredients collected locally from the forest. The value, fixed at 5-10 euros per kg depending on the species, is paid by training and environmental outreach activities to be realised by the association under the education and outreach activities organised annually by ERSAF.
SPA IT2070402 Alto Garda BS	F4 - Raw materials (wood, timber, fibers, ...)	€ 18.175,88	A quantity of timber (used sustainably) is put on the market to partially fund conservation activities
	F8 - Fresh water	€ 4.918.433,79	Monetary contribution for stewardship and restoration activities to maintain provisioning of fresh drinking water
	C1 - Aesthetic value	n.d.	Activation of a telephone number to allocate small payments (€1) via SMS to cover costs of safeguarding and restoration of cultural recreational services
	F5 - Mushrooms and truffles, berries, non wood forest products	n.d.	The "Eat your habitat wooding" cultural association signed a contract at the conclusion of the project for gathering of buds larch, fir and herbaceous species in order to create new dishes for restaurants with ingredients collected locally from the forest. The value, fixed at 5-10 euros per kg depending on the species, is paid by training and environmental outreach activities to be realised by the association under the education and outreach activities organised annually by ERSAF.
SPA IT2040601 Bagni Masino, Val di Mello	R3 - Regulation of water (recharge of aquifers)	€ 220.171.865,00	Contribution on the part of BIM Adda for stewardship and restoration of water regulation services
	C2 - Recreational value (ecotourism...)	€ 405.795,41	Activation of a telephone number to allocate small payments (€1) via SMS to cover costs of safeguarding and restoration of cultural recreational services
	C1 - Aesthetic value	n.d.	Activation of a telephone number to allocate small payments (€1) via SMS to cover costs of safeguarding and restoration of cultural recreational services
	F5 - Mushrooms and truffles, berries, non wood forest products	n.d.	The "Eat your habitat wooding" cultural association signed a contract at the conclusion of the project for gathering of buds larch, fir and herbaceous species in order to create new dishes for restaurants with ingredients collected locally from the forest. The value, fixed at 5-10 euros per kg depending on the species, is paid by training and environmental outreach activities to be realised by the association under the education and outreach activities organised annually by ERSAF.

SCI IT2040019 <i>Bagni Masino</i>	R3 - Regulation of water (recharge of aquifers)	€ 60.875.785,00	Contribution on the part of BIM Adda for stewardship and restoration of water regulation services
	R5 - Protection from erosion and geological instability (landslides, slope instability)	€ 179.425,00	Contribution on the part of BIM Adda for stewardship and restoration of water regulation services
	C2 - Recreational value (ecotourism...)	€ 405.795,41	Activation of a telephone number to allocate small payments (€1) via SMS to cover costs of safeguarding and restoration of cultural recreational services
	F5 - Mushrooms and truffles, berries, non wood forest products	n.d.	The "Eat your habitat wooding" cultural association signed a contract at the conclusion of the project for gathering of buds larch, fir and herbaceous species in order to create new dishes for restaurants with ingredients collected locally from the forest. The value, fixed at 5-10 euros per kg depending on the species, is paid by training and environmental outreach activities to be realised by the association under the education and outreach activities organised annually by ERSAF.
SCI IT2040020 <i>Vai di Mello</i>	R3 - Regulation of water (recharge of aquifers)	€ 134.951.950,00	Contribution on the part of BIM Adda for stewardship and restoration of water regulation services
	R5 - Protection from erosion and geological instability (landslides, slope instability)	€ 397.151,00	Contribution on the part of BIM Adda for stewardship and restoration of water regulation services
	C2 - Recreational value (ecotourism...)	€ 405.795,41	Activation of a telephone number to allocate small payments (€1) via SMS to cover costs of safeguarding and restoration of cultural recreational services
	F5 - Mushrooms and truffles, berries, non wood forest products	n.d.	The "Eat your habitat wooding" cultural association signed a contract at the conclusion of the project for gathering of buds larch, fir and herbaceous species in order to create new dishes for restaurants with ingredients collected locally from the forest. The value, fixed at 5-10 euros per kg depending on the species, is paid by training and environmental outreach activities to be realised by the association under the education and outreach activities organised annually by ERSAF.
SCI/SPA IT8050055 <i>Monti Alburni</i>	R5 - Protection from erosion and geological instability (landslides, slope instability)	€ 128.006.850,50	Criterion of performance in phase of evaluation
	C2 - Recreational value (ecotourism...)	€ 1.295.980,00	A tourism business allocates part of their income (20%) derived from tourism activities and defined by the tour operator to the maintenance of trails that perform protection and preservation functions for existing natural capital
	R1 - Carbon sequestration	€ 42.726.299,57	An agreement was stipulated between CURSA and Phoresta ONLUS for all project sites, in which the latter has committed to putting carbon credits on the market which are to be recognised by site management agencies. Revenues from the scheme are managed by municipalities as forests are publicly owned. These are bound to management of forests to ensure maintenance of ecosystem services and the effective, conservation oriented management of the site itself.
SCI IT8050025 <i>Monte Stella</i>	C2 - Recreational value (ecotourism...)	€ 675.374,00	A tourism business allocate part of their income (20%) derived from tourism activities and defined by the tour operator to the maintenance of trails that perform protection and preservation functions for existing natural capital
SCI IT8050006 <i>Balze di Teggiano</i>	F3 - Hunting and fishing	€ 55.590,00	Self-financing based on sale of wild boar products to mitigate damage to cultivation caused by boar. The park will reinvest these resources in conservation activities and maintenance of functioning of agroforestry ecosystems of the park
	F7 - Genetic resources	n.d.	A PES scheme has been developed that sees to the signing of an agreement with pharmaceutical companies and herborists (service beneficiaries) interested in aromatic herbs, foods and medicines usable for phytotherapy, aromatherapy and homeopathic medicine, of which the site is rich. Fees paid to the park (the service provider) would be used for conservation actions regarding agricultural and forest ecosystems that provide the genetic resources that lie at the base of this PES agreement. The park has embarked on a dialogue with an interested company, however, the feasibility of the PES scheme is being evaluated through a study being undertaken with the Italian Environment Ministry concerning the means of resource harvesting and other practices to be adopted since harvest of these wild species has been constrained by the recent entry into force of the Nagoya Protocol.
SCI IT9310014 <i>Fagosa</i>	F7 - Genetic resources	€ 1.408.809,50	The PES agreement is implemented through annual contracts signed by the park management authority and voluntary civilian protection associations for protection against forest fires. The agreement has the objective of ensuring better management of Bosnian pine through management of forest fires, which represent one of the main threats to survival of this species.
	F8 - Fresh water	€ 15.683.877,72	This PES scheme sees involvement of the Lucano acqueduct that, as management body responsible for integrated hydrological services, pays an annual sum to the park for specific conservation activities aimed at water resources management
	C2 - Recreational value (ecotourism...)	€ 1.800.000,00	The aim is to introduce a visitor fee or tourist tax that would be proposed to the constituent "Union of Municipalities" to be donated to the maintenance and enhancement of sustainable tourism activities
SCI IT9310008 <i>Petrosa</i>	C1 - Aesthetic value/C3 - Cultural inspiration	€ 36.686,00	The PES scheme sees that a portion of the financial resources of the park annually allocated to municipalities for cultural and enogastronomic initiatives (in a specific chapter of the budget), are destined to associations for initiatives aimed at increasing the level of awareness of the aesthetic and cultural values of the La Petrosa site

SPA IT4090006 Monte Carpegna	F2 - Forage, pasture	€ 190.410,00	Herders commit to grazing herds in the military polygon, respecting regulations set by the management body, benefiting from a fee paid by herders for improvement of the quality of the ecosystem
	F3 - Hunting and fishing	€ 3.000,00	Realisation of an agreement between the provincial meat processing centre and the park management body for a meat supply chain that valorises the park using park branding
	F8 - Fresh water	€ 384.592,50	The company, Hera SPA, commits to paying the park for fresh water services. The payment is made on the condition that money is used to finance (directly or indirectly) management activities in the territory dedicated to restoration, maintenance and improvement of the ecological function of ecosystems from which this ecosystem service flows.
SCI ITA020007 Ficuzza	C2 - Recreational value (ecotourism...)	€ 326.814,00	The agreement, signed by a consortium dedicated to promotion of culture and environment, stipulates constitution of an ad hoc fund in which contributions by each visitor will be set aside. The money set aside, in concert with the region, will be used to finance specific conservation initiatives, defined by management needs of the site.
			The agreement, signed by a tour operator, stipulates setting aside a percentage of the amount paid by the participants of initiatives that involve the SCI. This amount will be set aside in an ad hoc fund and subsequently, in cooperation with the region, destined to specific conservation objectives defined according to the needs of the site.
	F8 - Fresh water	€ 1.800.000,00	The agreement provides for an annual allocation (to be determined) by AMAP S.P.A. in order to finance studies on two macro-areas: types of sustainable forest management for maintenance of the resource and service remuneration models that are useful for developing fees that incorporate the value of resource use.
SCI ITA020008 Busambra	F2 - Forage, pasture	€ 625.934,00	The agreement, which has been drafted but not yet signed, provides that animal breeders and producers of Caciocavallo di Godrano may advertise the origin of raw materials for products that originate from animals that graze in the area. Each producer puts aside a quota for each kilogram of product placed on the market bearing the statement of origin. The proceeds from this scheme will be used annually to finance research studies conducted by technical institutes, research institutes or universities. The object of study, as recommended by the site management, may be tied to improvement of habitats and/or the products obtained following an ecosystem approach. It is expected that the agreement will be signed following renewal of pasture assignments.
	F8 - Fresh water	€ 300.000,00	The agreement provides for an annual allocation (to be determined) by AMAP S.P.A. in order to finance studies on two macro-areas: types of sustainable forest management for maintenance of the resource and service remuneration models that are useful for developing fees that incorporate the value of resource use.
SCI ITA060006 Sambughetti	C2 - Recreational value (ecotourism...)	€ 71.880,00	The agreement, signed by an association that promotes environmental education initiatives, stipulates the contribution of an amount of money for each participant to an ad hoc fund that has been created to finance, in concert with the region, specific conservation objectives and management of the site

Communication and events

The communication plan of the project aimed to

- Promote awareness of ecosystem services flowing from Natura 2000 sites;
- Promote dissemination of knowledge concerning methodologies developed during the project;
- Promote tools for application of models developed (Actions B10-B11);
- Promote a higher degree of participation of stake holders and civil society regarding ES and PES;
- Promote awareness of the project and its products to local government and to managers of Natura 2000 sites;
- Contribute to the application of EU policies concerning conservation and management of the Natura 2000 network;
- Promote the design of new governance tools in the context of future environmental and agricultural policies (2013-2020) of the European Union.

The communication activities carried out in the project can be summarised as follows

- Preparation and publication of website content;
- Drafting and dissemination of press releases;
- Maintaining communication through local and national newspapers;
- Organisation of public events;
- Planning and drafting of contents for print material.

PROJECT WEBSITE

www.lifemgn-serviziecosistemici.eu

SOCIAL NETWORKING

facebook.com/ProgettoLifeMakingGoodNatura
twitter.com/LifeMGN

THE NEWSLETTER

The newsletter had as its scope the regular dissemination of information and activities of the project, ensuring continuous communication between different beneficiaries.

The periodical Ecosystem Services Info was a communication tool open to contribution by all partners, comprising a variable number of A4 pages (6 to 20) with photos, figures, etc. Six issues were published over the course of the project, with two special editions, excluding newsletter issue 0 published in July 2013, which had the function of describing the project in general terms. All issues have carried a theme in some depth and contained pages dedicated to directories, news, initiatives, events and “save the date” items.

www.lifemgn-serviziecosistemici.eu/IT/docu/Pages/materiali.aspx

THE BROCHURE

The brochure had as its scope the dissemination of project details, themes, innovative aspects, methodologies, proposed solutions, results and means of obtaining information. In addition, the brochure contained information sheets on pilot sites, in which relationships are highlighted between ES identified at the site and flows of economic and social benefits. The brochure had a print run of 5000 copies of which 1500 were in published English.

www.lifemgn-serviziecosistemici.eu/IT/docu/Pages/materiali.aspx

SCIENTIFIC ARTICLES

Numerous scientific articles were published over the project's duration. Scientific publications focussed principally on the results of the project and analysis of the integration between conservation of Natura 2000 sites and their management

www.lifemgn-serviziecosistemici.eu/IT/docu/Pages/documenti.aspx

PUBLIC EVENTS

The project team was active in organising and participating in numerous public communication events, both at national and international levels. Among the many initiatives held critical for dissemination, we highlight:

The Seminar “Ecosystem services of alpine forests”
www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2016/11.aspx

The concluding event of the LIFE+ MGN project “The economy of nature: ecosystem services and PES schemes for more effective management of the Natura 2000 network”
www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2016/10.aspx

The LIFE+ MGN event “From ecosystem services to payment for ecosystem services”
www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2016/09.aspx

The round table “Multifunctional Landscape and Ecosystem Services: The role of evaluation of urban BMPS”
www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2016/06.aspx

The workshop “The PSEA instrument for forest management in floodplains”
www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2016/05.aspx

The European meeting of projects concerning ecosystem services
www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2016/04.aspx



The conference “Ecosystem services in Emilia-Romagna: the experience of LIFE+ MGN”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2016/03.aspx

The conference “PES (Payment for Ecosystem Services) and management of agroforestry ecosystems”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2016/01.aspx

The workshop “MAES 2015” thematic session: “Assessing the impact of projects on ecosystem services at the local level”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_021.aspx

The event “FÜR I PES Systems of payment for ecosystem and environmental services (PES): between environmental stewardship and sustainable tourism”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_020.aspx

The 19th edition of ECOMONDO, the international fair and technology platform for the Green and Circular Economy in the Euro-Mediterranean area

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_019.aspx

The International Conference of the Land Conservation Network

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_018.aspx

The 26th annual general assembly of Fedenatur - conference “Ecosystem services in peri-urban parks – Nourishing metropolitan areas to feed the planet”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_015.aspx

European Commission, 2015 edition of Green Week: “Natura 2000 sites at the centre of the European meetings on nature conservation”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_014.aspx

The final event of the LIFE project for Monti della Tolfa

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_012.aspx

The international conference of the LIFE+ MGN project: “Valuing nature – ecosystem services for feeding the planet”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_011.aspx

The international congress “Little Sydney: protecting nature in Europe”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_010.aspx

European day for the celebration of the Natura 2000 network – meeting the LIFE projects aimed at conservation of fluvial ecosystems and their species

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_009.aspx

The conference “Hidden biodiversity: values and practices of biological diversity in fragile areas”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_006.aspx

The conference “Management and conservation of arid grasslands in Natura 2000 sites – LIFE RI.CO.PR.I: comparison with other experiences”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_005.aspx

The workshop “Integrated management of payments for environmental services, environmental compensation and of the Common Agricultural Policy in the Region of Veneto”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2015/news_002.aspx

The conference “Natura 2000 in action! – regional cooperation for implementing the Natura 2000 network” – third annual conference of the European Learning Network for Regions and Biodiversity

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/27.aspx

The workshop “Governance and economic analysis”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/26.aspx

The workshop “Ecosystems and economics working group - realising the promise of ecosystem services for nature reserves”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/25.aspx

International Forestry Congress: “Designing the future for the forest sector”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/23.aspx

IUCN World Parks Congress – Pavilion of the European Commission – Presentation of the LIFE+ MGN project

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/20.aspx

IUCN World Parks Congress 2014

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/16.aspx

States General of the Green Economy

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/15.aspx

“Workshop on valuation of forest ecosystem services”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/12.aspx

The 25th Congress of the Italian Ecological Society S.It.E. “Ecology today: responsibility and governance”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/11.aspx

The third AIEAA conference “Feeding the planet and greening agriculture: Challenges and opportunities for the bio-economy”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/09.aspx

LIFE Platform meeting “Climate change – an ecosystem services approach to adaptation and mitigation”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/07.aspx

Scientific Institutional Network for the application of results of the LIFE+ Making Good Natura project

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/06.aspx

Workshop organised under the Life+ EMoNFUr project

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/05.aspx

First Italian meeting for MAES (Mapping and Assessment of Ecosystems and their Services)

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/04.aspx

Presentation of the Life+ MGN project to representatives of the National Park Service

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2014/03.aspx

The workshop “Financing Natura 2000”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2013/015.aspx

The conference “Ecosystem services: new approaches for the sustainable management of rural areas”

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2013/001.aspx

National meeting on the LIFE+ programme

www.lifemgn-serviziecosistemici.eu/IT/news/Pages/2012/002.aspx

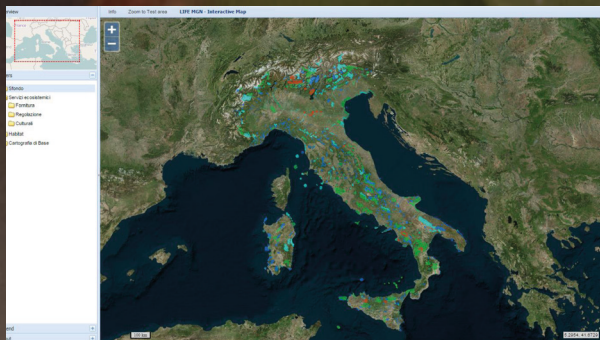
And more...

www.lifemgn-serviziecosistemici.eu/IT/events/Pages/default.aspx

Tools for application and products of LIFE+ MGN

THE WebGIS

The LIFE+ Making Good Natura project makes available a simple and free service build on top of the informational and cartographic capital developed and used over the course of the project. The WebGIS represents an instrument for communication and sharing of geospatial data with other users. Requiring only an ordinary web browser on the user side, the WebGIS makes it possible to perform searches using geographical or alphanumeric terms. This research tool is integrated into a single interface that also provides download services for images. The WebGIS system represents a platform for managers that may use it to “read” multiple environmental aspects of the areas for better decision-making, and for citizens that may use the platform to improve their knowledge of the territory in which they live and receive environmental benefit. Using the platform, it is possible to research results for one or more themes, obtain information on areas, perform research using predefined search terms, and save and print images.



DYNAMIC QUALITATIVE MODELS FOR MANAGEMENT OF NATURA 2000 SITES

The flow of ES from Natura 2000 sites depend on numerous variables describing ecological (chemical, physical, biological) and socio-economic processes. These variables interact at different temporal and spatial scales. It would be impossible to gain a full understanding of the complexity of these processes on the basis of the data that is usually available for each site. Nonetheless, a system dynamics (SD) approach allows us to distinguish relevant variables, relationships of cause and effect, and visualise recurrent dynamics. Using dynamic qualitative models for management of Natura 2000 sites, we propose simplified systems models on which we base the flows of each selected ES. In other words, the general purpose of these models is to support management of the sites through a better understanding of the complex dynamics at play and of the possible consequences of changes to the system.

The dynamic models for MGN in the Insight Maker environment

Insight Maker is a modelling and simulation environment available on the internet. Some of the models available are accessible using the following links

- <https://insightmaker.com/insight/41089/Modelli-dinamici-Servizi-Ecosistemici-di-fornitura-specie-cacciabili-legname-funghi-1>
- <https://insightmaker.com/insight/41252/Modelli-dinamici-Servizi-Ecosistemici-di-fornitura-specie-cacciabili-legname-funghi-2>
- <https://insightmaker.com/insight/42700/Modelli-dinamici-Servizi-Ecosistemici-Culturali-1>
- <https://insightmaker.com/insight/42696/Modelli-dinamici-Servizi-Ecosistemici-Culturali-2>
- <https://insightmaker.com/insight/42702/Modelli-dinamici-Servizi-Ecosistemici-Culturali-3>

The dynamic models for MGN in Vensim

Vensim is a SD modelling program that is available in different versions. The free version (Vensim PLE) provides the functionality necessary for the project and can be downloaded at the following link <http://vensim.com/free-download/>

THE D4 PLATFORM

The LIFE+ MGN project has developed a model that represents the leading edge in terms of development of governance schemes for effective management of agroforestry ecosystems in the European context. Through the application of the MGN model, it is possible to quantify, in economic terms, the ES flows for an area. This model is in turn useful for identification of PES schemes and self-financing mechanisms.

Implementation of MGN plays an important role in sustaining, promoting and valorising natural areas. Through evaluation in economic terms of added value, it is possible to implement and sustain policies and tools for management and self-financing. Under the LIFE+ MGN project, a virtual platform was developed that allows users to understand, in basic terms, the functioning of the project and the MGN methodology, and to access technical help regarding implementation of the methodology. The principal aim in creating this platform was maximum dissemination of knowledge and application of the methodology in Italian protected areas. Using the platform, protected area managers may find support for calculating PES for their sites, the economic valuation of ES present, and the identification of self-financing mechanisms. The platform is active and accessible to users at the following link <http://www.lifemgnserviziecosistemici.eu/IT/applica/Pages/01.aspx>



MANUAL FOR THE ASSESSMENT OF ECOSYSTEM SERVICES AND THE IMPLEMENTATION OF PES SCHEMES IN AGROFORESTRY AREAS

The Manual, together with other instruments such as the WebGIS and the platform is designed as an operational tool for replicability of results achieved. It indicates how and when different activities are to be carried out by users of the methodology, and guides users through the assessment of ecosystem services and implementation of payment schemes. The Manual makes possible the objective recognition of a role for the territory subject to analysis and most importantly, allows for communication of this role and its value to the local community that has benefited from flows of ecosystem services. The Manual was written for technicians, management bodies and the government administrators of Natura 2000 sites, but also for other types of protected areas, municipalities, and larger territorial units interested in valorisation of their territories in terms of ES. The principal aim of the Manual is to make the LIFE+ Making Good Nature project methodology replicable within other areas. If we modify the specific aim of conservation of species and habitats in the Natura 2000 network, the project methodology can be applied anywhere – with appropriate modifications – for the valorisation of natural capital and flows of ecosystem services.

OTHER PRODUCTS AND IMPACTS

Application of the demonstrative model to qualitative and quantitative assessment of ecosystem services in the pilot sites

On the basis of the qualitative evaluation of habitats and land cover, questionnaires and stakeholder meetings, 2-3 ES were selected for each LIFE+ MGN pilot site. For each of these ES, the results of biophysical and monetary quantification are reported in the document available at the following link

http://www.lifemgn-serviziecosistemici.eu/IT/Documents/doc_mgn/LIFE+MGN_Report_B4-9.pdf

Software for evaluation and quantification of ecosystem services

Flows of ES provided by different Natura 2000 sites depend on numerous variables concerning ecological (chemical, physical, biological) and socio-economic processes. These variables interact at different temporal and spatial scales. The approach to system dynamics (SD) allows us to distinguish relevant variables, relationships of cause and effect, and to visualise recurrent dynamics.

http://www.lifemgn-serviziecosistemici.eu/IT/Documents/doc_mgn/LIFE+MGN_Report_B10.3.pdf

The Environmental Connection, i.e., the bill on “environmental provisions for promotion of measures of the green economy and for reduction of overuse of natural resources” was approved by the House, making it State law. LIFE+ MGN considers and analyses the products of the project – including activities, results, the Manual, the WebGIS, self-financing and PES mechanisms, scientific literature, reports and models produced – in relation to the articles of the “Environmental Connection law” in the field of environmental and ecosystem services.

http://www.lifemgnserviziecosistemici.eu/IT/Documents/Newsletter/LIFE+MGN_Newsletter_s2.pdf

Networking activities

All presentations used in support of interventions presented during dissemination and communication activities of the project are downloadable from the website.

<http://www.lifemgn-serviziecosistemici.eu/IT/docu/Pages/documgn.aspx> Summer School 2014 - ANALISI E GOVERNANCE DEI SERVIZI ECOSISTEMICI

The Summer School organised by MGN confronted the theme of ecosystem services, integrating diverse fields of study (ecology, economy and governance) through illustration of modelling tools, including ARIES and the LIFE+ MGN model.

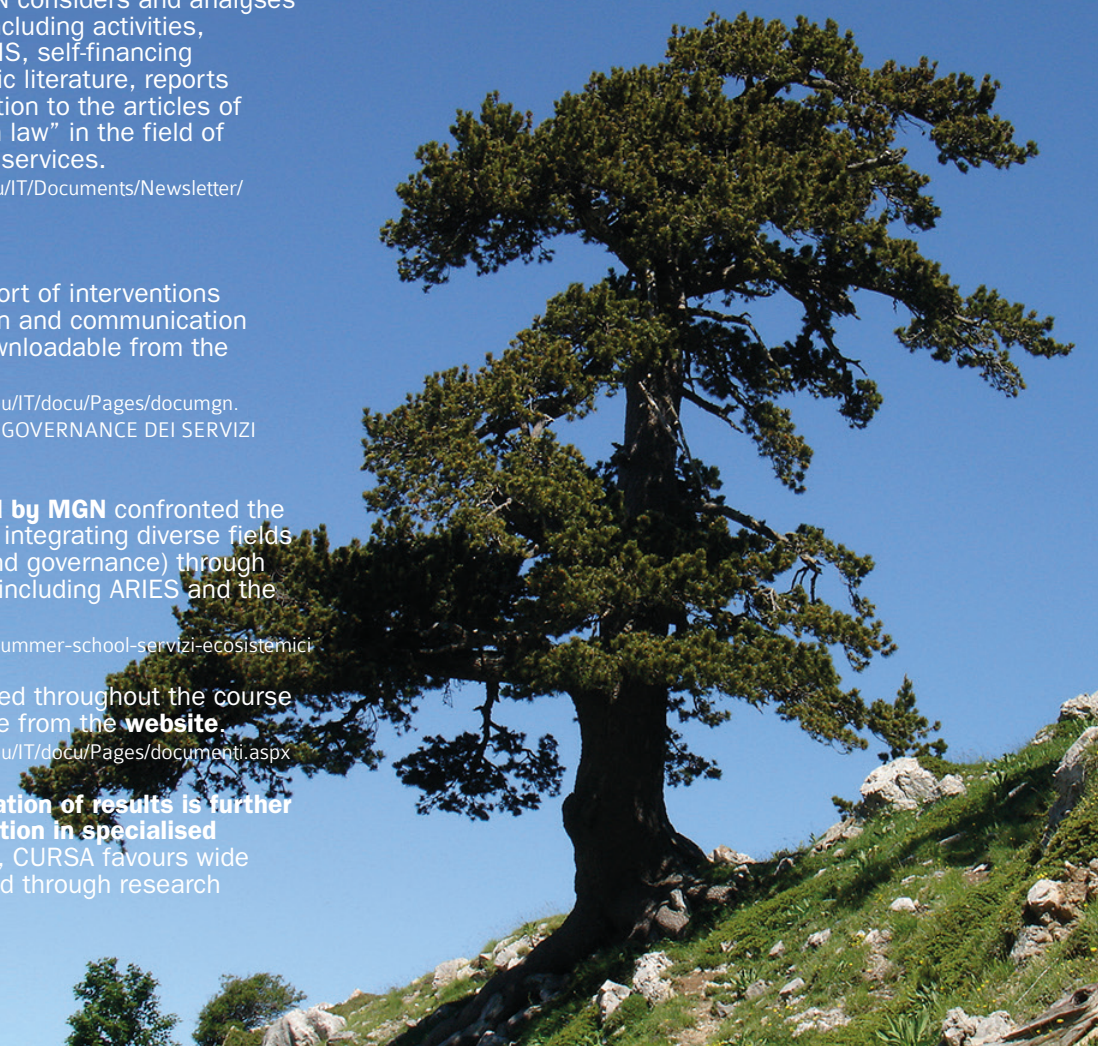
<http://www.cursa.it/ecms/it/formazione/summer-school-servizi-ecosistemici>

All scientific publications created throughout the course of the project are downloadable from the **website**.

<http://www.lifemgn-serviziecosistemici.eu/IT/docu/Pages/documenti.aspx>

Dissemination and communication of results is further accomplished through publication in specialised scientific journals. In this way, CURSA favours wide diffusion of knowledge acquired through research activities.

<http://www.cursa.it/ecms/it/pubblicazioni>



Partners

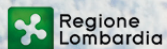
Scientific and administrative lead



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